"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, N.D.; KORCHEVOY, Yu.P.

Mobility and scattering cross section of cesium ions in a weakly ionized cesium plasma. Zhur. tekh. fiz. 33 no.9:1140-1148 S '63. (MIRA 16:11)

1. Kiyevskiy gosudarstvennyy universitet.

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

ACCESSION NR: AP4043677 S/0109/64/009/008/1433/1439

AUTHOR: Morgulis, N. D.; Levitskiy, S. M.; Pantchevskiy, V. A.

TITLE: Determination of parameters of gas-discharge cesium plasma by the superhigh-frequency method

SOURCE: Radiotekhnika i elektronika, v. 9, no. 8, 1964, 1433-1439

TOPIC TAGS: plasma, plasma gas collision, plasma measurement, cesium plasma, gas discharge plasma

ABSTRACT: An experimental investigation of the electron-collision frequency and rate of decay of a weak ionized cesium plasma by the SHF-resonator method at 3-cm wavelength is reported. Charge concentrations within 10^{11}—10^{12} cm^{-3} and cesium vapor pressures within 0.01—0.2 torr were used. By measuring the Q-factor of a cesium-plasma-filled resonator at various pressures, the collision frequency at 1 torr was found to be 3×10^9 per sec and the effective cross-section

Card 1/2

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ACCESSION NR: AP4043677

of the scattering of electrons by plasma atoms, 0.4×10^{-14} cm^2. Also, the coefficient of bipolar diffusion (10—20 cm^2/sec) was determined. This data is compared with results published by other researchers and discussed. Orig. art. has: 6 figures and 5 formulas.

ASSOCIATION: Kiyevskiy gosudarstvenny*y universitet (Kiev State University)

SUBMITTED: 15Jun63 ENCL: 00

SUB CODE: ME NO REF SOV: 008 OTHER: 008

Card 2/2

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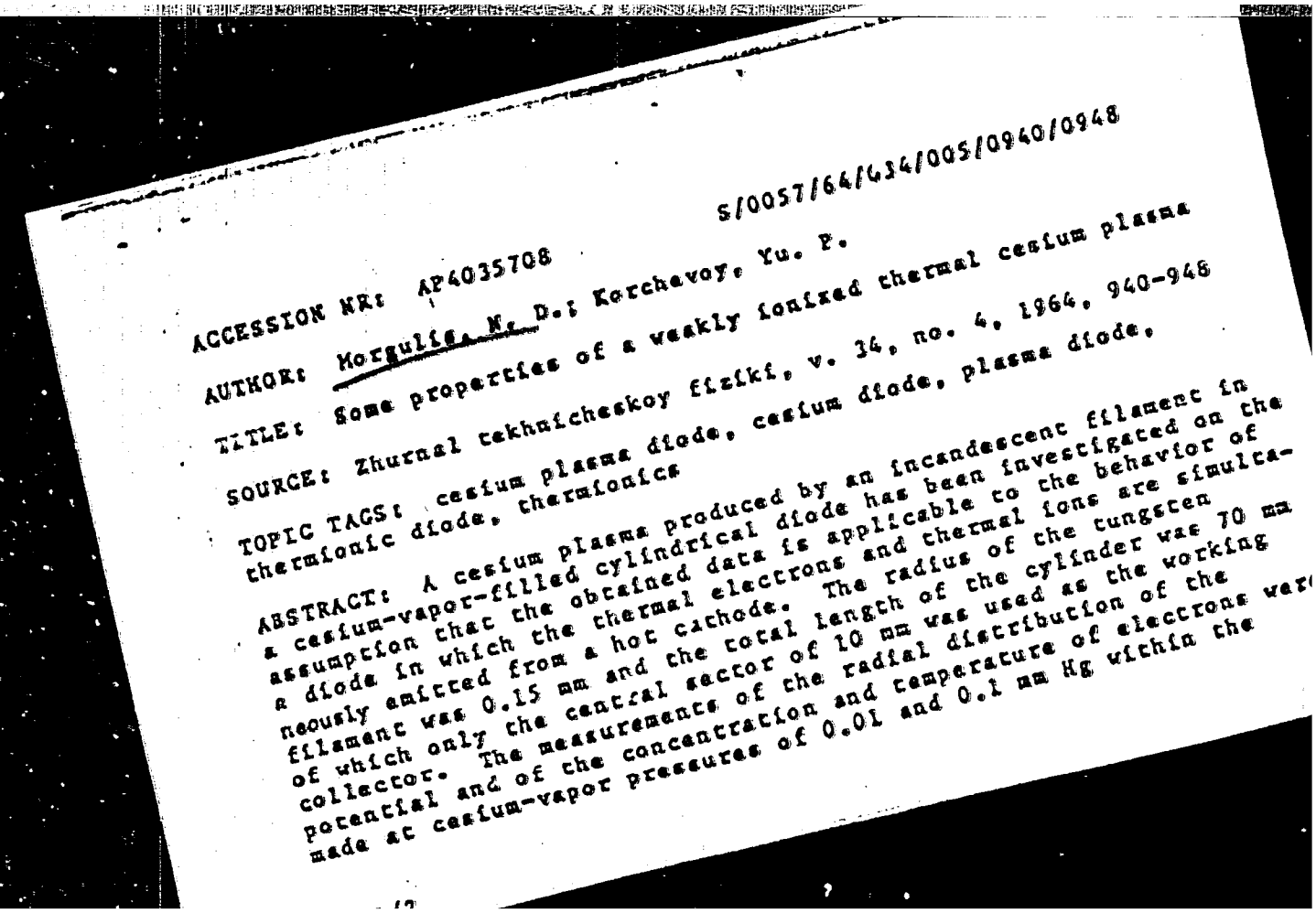

ACCESSION NR: AP4035708 S/0057/64/034/005/0940/0948

AUTHOR: Morgulis, N. D.; Korchevoy, Yu. P.

TITLE: Some properties of a weakly ionized thermal cesium plasma

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 34, no. 4, 1964, 940-948

TOPIC TAGS: cesium plasma diode, cesium diode, plasma diode, thermionic diode, thermionics

ABSTRACT: A cesium plasma produced by an incandescent filament in a cesium-vapor-filled cylindrical diode has been investigated on the assumption that the obtained data is applicable to the behavior of a diode in which the thermal electrons and thermal ions are simultaneously emitted from a hot cathode. The radius of the tungsten filament was 0.15 mm and the total length of the cylinder was 70 mm of which only the central sector of 10 mm was used as the working collector. The measurements of the radial distribution of the potential and of the concentration and temperature of electrons were made at cesium-vapor pressures of 0.01 and 0.1 mm Hg within the

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ACCESSION NR: AP4035708

range of temperatures of 1440—1880 K. It has been established that when the diode works at the emf regime a bipolar diffusion of charges from the filament to the anode can take place. Orig. art. has: 8 figures and 5 formulas.

ASSOCIATION: none

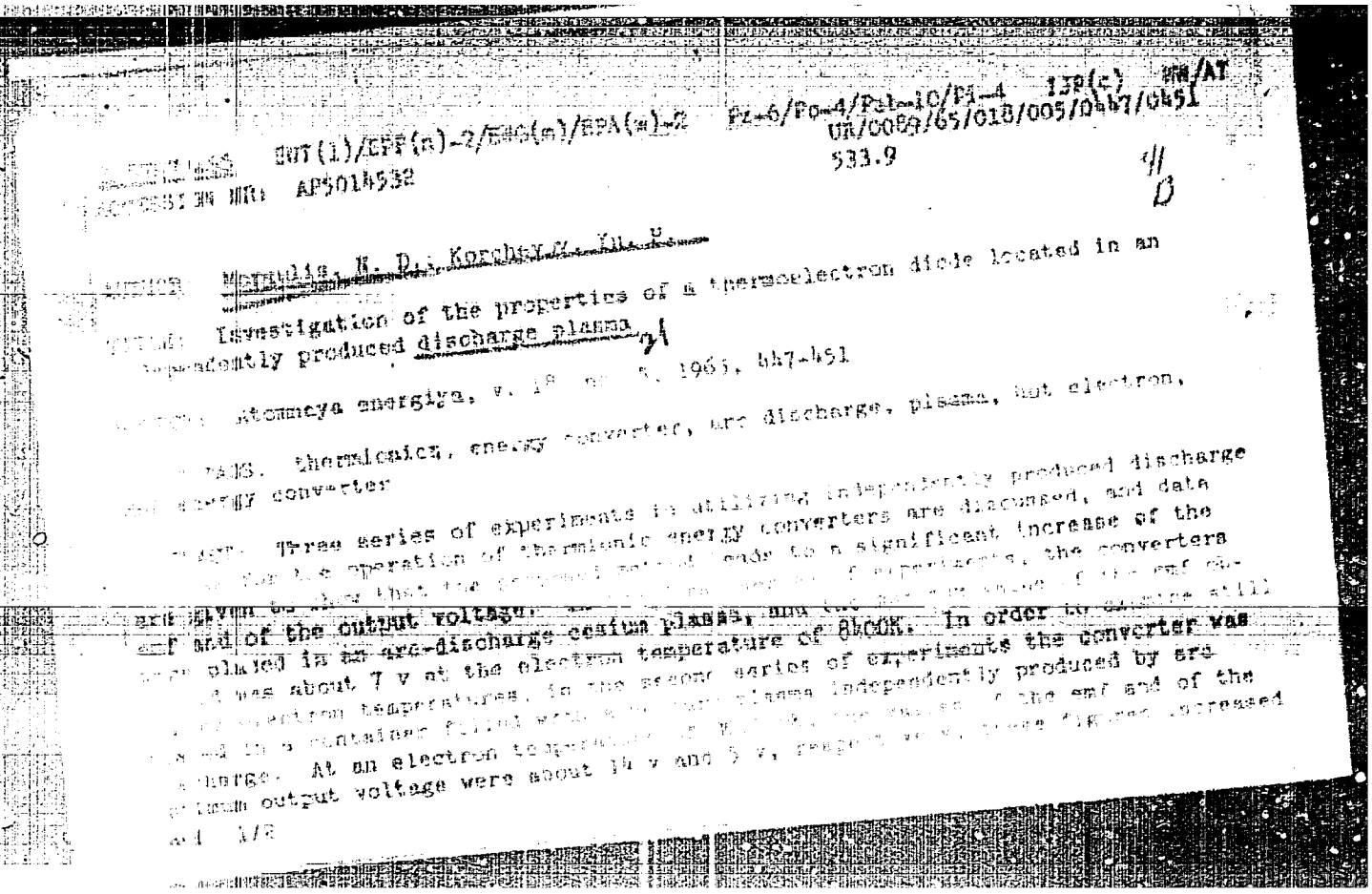
SUBMITTED: 25Apr63 DATE ACQ: 20May64 ENCL: 00

SUB CODE: EC NO REF SOV: 009 OTHER: 004

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0



EWT(1)/EPF(n)-2/EWG(m)/EPA(w)-2 Pz-6/Po-4/Pal-10/Pi-4 13P(c) WW/AT
UR/0089/65/018/005/0447/0451
AP5014532 533.9

Merkulin, N. P.; Korchagin, Yu. D.

Investigation of the properties of a thermoelectron diode located in an independently produced discharge plasma

Atomnaya energiya, v. 18, no. 5, 1965, 447-451

TOPIC TAGS: thermionics, energy converter, arc discharge, plasma, hot electron, energy converter

ABSTRACT: Three series of experiments in utilizing independently produced discharge for the operation of thermionic energy converters are discussed, and data are given that the [illegible] of the emf and of the output voltage. [illegible] cesium plasma, and [illegible] in order to achieve a plasma in an arc-discharge cesium plasma, and [illegible] was about 7 v at the electron temperature of 8400K. In order to achieve a electron temperatures, in the second series of experiments the converter was [illegible] and in a container filled with [illegible] plasma independently produced by arc discharge. At an electron temperature of [illegible] the emf and of the maximum output voltage were about 1½ v and 5 v, respectively. [illegible] increased

Card 1/2

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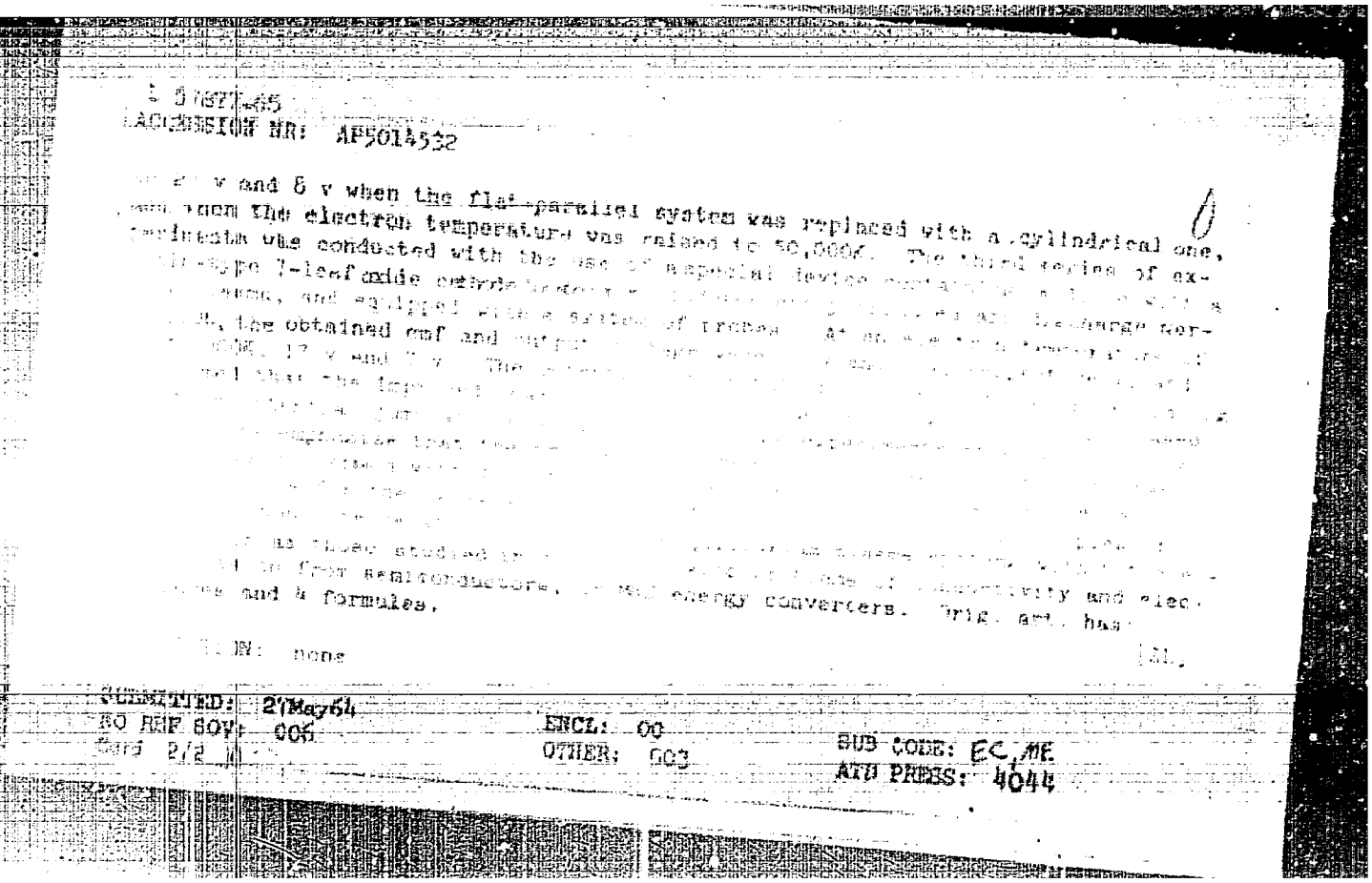

ACCESSION NR: AP5014532

v and δ v when the flat-parallel system was replaced with a cylindrical one, from the electron temperature was raised to 50,000K. The third series of ex-periments was conducted with the use of [illegible] type 7-leaf oxide cathode [illegible], and equipped with a system of probes [illegible], the obtained emf and [illegible] v and [illegible] v. The [illegible] from semiconductors, [illegible] energy converters. [illegible] and 4 formulas.

ASSOCIATION: none

SUBMITTED: 27May64 ENCL: 00 SUB CODE: EC, ME

NO REF SOV: 006 OTHER: 003 ATD PRESS: 4044

Card 2/2

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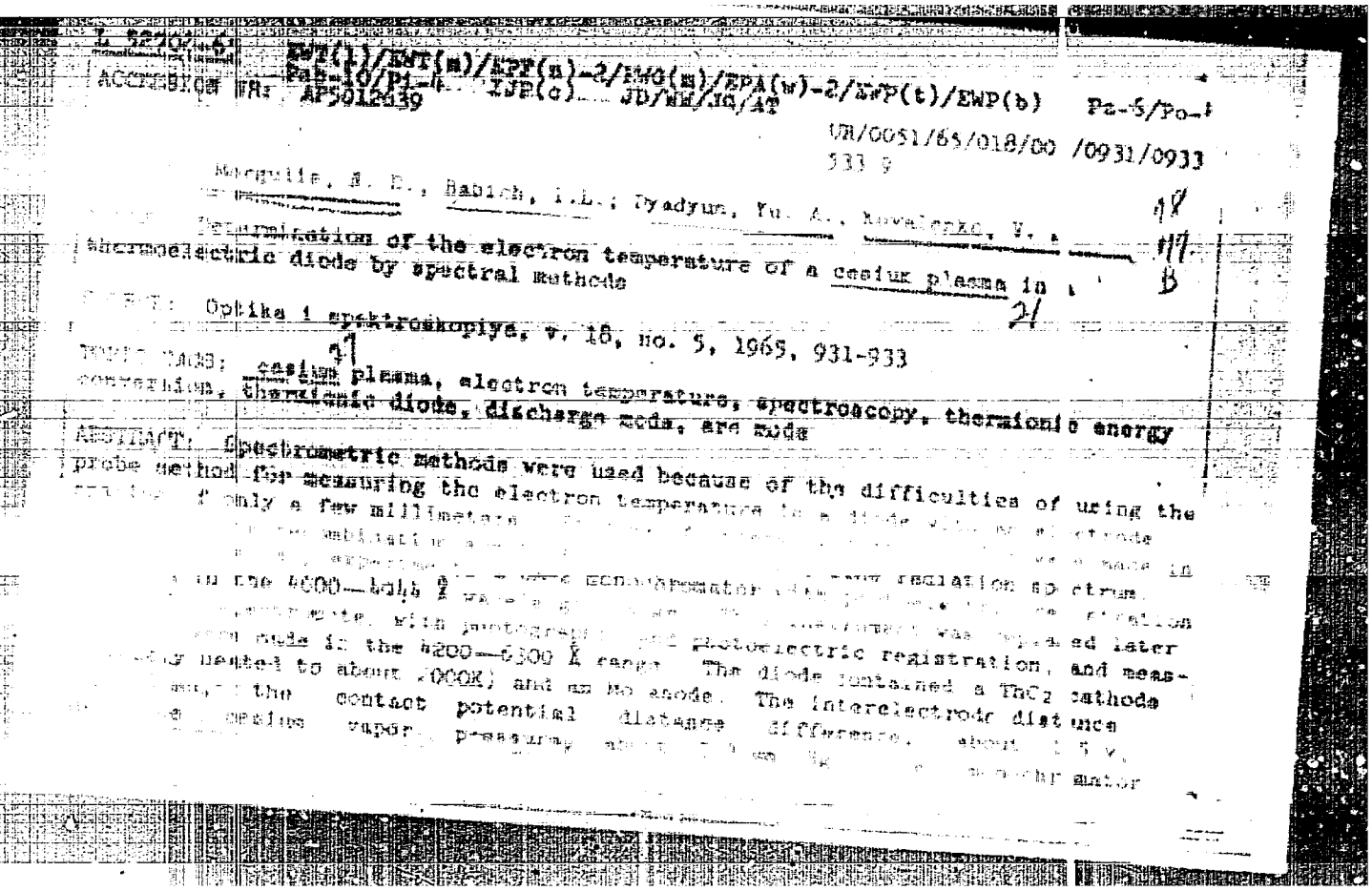

L 22[illegible]-65 EWT(l)/EWT(m)/EPF(n)-2/EWG(m)/EPA(w)-2/EWP(t)/EWP(b) Pz-5/Po-4
ACCESSION NR: AP5012039 Pab-10/Pi-4 IJP(c) JD/WW/JG/AT UR/0051/65/018/00 /0931/0933
533.9

Margulis, V. D., Radich, I.L.; Dyadyun, Yu. A., Kovalenko, V. [illegible]

Determination of the electron temperature of a cesium plasma in a thermoelectric diode by spectral methods

SOURCE: Optika i spektroskopiya, v. 18, no. 5, 1965, 931-933

TOPIC TAGS: cesium plasma, electron temperature, spectroscopy, thermionic energy conversion, thermionic diode, discharge mode, arc mode

ABSTRACT: Spectrometric methods were used because of the difficulties of using the probe method for measuring the electron temperature in a diode with [illegible] only a few millimeters [illegible] electrode [illegible] made in the 4000—6400 Å [illegible] with photographic [illegible] photoelectric registration, and measured in the 4200—6300 Å range. The diode contained a ThC2 cathode [illegible] the contact potential distance difference, about 1.5 v, [illegible] cesium vapor pressure [illegible] Mar[illegible]

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

L 52708-65
ACCESSION NR: AP5012639

measurements, which led to values corresponding to electron temperatures T_e = 2500K, indicated a linear n_e/i dependence. The experiments made with the spectrometer showed that at i_g = 10 amp/cm^2 the characteristics are similar to those of a normal [illegible] should start acting. It is emphasized that the Maxwellian velocity distribution of the electrons and the observed uniformity of the temperatures of slow and relatively fast electrons may help to explain the nature of phenomena in Alpha not only in a [illegible] but also in the [illegible] regions and in the instruments. "The authors [illegible] for making available to them the DFS-4 spectrometer." Orig. art. has: 2 figures [ZL]

ASSOCIATION: none

SUBMITTED: 20Apr64 ENCL: 00 SUB CODE: ID, EC

NR REF SOV: 005 OTHER: 006 ATD PRESS: 4012

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

L 255-5-66 EWT(l)/EWT(m)/ETC(f)/EWG(q)/EWP(v)/EWP(t)/EWP(k)/T/EWP(n)-2
ACC NR: AP6011403 SOURCE CODE: UR/0057/66/036/003/0542/0548
IJP(c) AT/JD/RM/JG
AUTHOR: Morgulis, N.D.; Polushkin, I.N.

ORG: Kiev State University (Kiyevskiy gosudarstvennyy universitet)

TITLE: Charge recombination during decay of a plasma in helium or argon at high pressure with an admixture of cesium vapor

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no.3, 1966, 542-548

TOPIC TAGS: ion recombination, recombination coefficient, plasma decay, helium, argon, cesium, gas discharge plasma, high pressure

ABSTRACT: As the first stage of an investigation of discharge plasmas in inert gases containing small admixtures of alkali metal vapors, the authors have investigated decay of helium and argon plasmas containing cesium. The plasmas were produced in 1 cm diameter, 20 cm long sealed glass tubes containing helium or argon at 100-150 mm Hg by discharge of a 5 kv, 10 μF capacitor. The discharge tube was short circuited with a thyratron some 40-100 microsec after initiation of the discharge, when the current density was 3-20 A/cm^2, and probe measurements were started after a further 40-80 μsec delay. The partial pressure of cesium in the discharge tube was varied from 10^{-8} to 0.1 mm Hg by adjusting the temperature of a side tube containing metallic cesium. Spectra of continuous arc discharges were observed and electron temperatures were derived from line intensity ratios. When the cesium pressure was high

Card 1/3

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(e.g. 0.02 mm Hg), only cesium lines were observed, suggesting that the plasma consisted entirely of ionized cesium in a neutral inert gas. At very low cesium concentrations the inert gas spectrum was prominent. An electron temperature of 3000 °K was obtained in a 5 A/cm^2 arc in helium at 110 mm Hg containing cesium at 0.02 mm Hg. This temperature is in agreement with electron temperatures found in pure cesium discharge plasmas under similar conditions by N.Morgulis et al. (Opt. i spektr., 18, 931,1965; Ukr.fiz.zhurn., 1,59,1956). The ion density during decay of the plasmas was determined from the positive current to cylindrical probes. The proportionality of the probe current to the two-fifths power of the probe potential was verified in preliminary experiments with steady arcs. That the plasma decay was due almost entirely to volume recombination, as was expected because of the high inert gas pressure, was shown by the fact that the reciprocal of the ion density increased linearly with time. The volume recombination coefficient was found to be close to 4×10^{-10} cm^3/sec whenever the cesium pressure exceeded a critical value (about 10^{-4} mm Hg in helium and 10^{-5} mm Hg in argon). Whenever the cesium pressure was below this critical value the recombination coefficient was close to 1×10^{-9} cm^3/sec in the helium mixtures and 4×10^{-7} cm^3/sec in the argon mixtures. The recombination coefficient obtained at the higher cesium pressures is in good agreement with that found by F.Mohler (J.Res.Bur.Stand.,19,447,1937) and Yu.Aleskovskiy (ZhETF, 44,840,1963) for pure cesium plasmas of like ion density and electron temperature, and the recombination coefficients obtained at the lower cesium pressures are in good agreement with values for helium and argon in the monograph literature. In at least one experiment with approximately the critical concentration of cesium, the

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ACC NR: AP6011403

decay curve (reciprocal ion density versus time) consisted of two straight lines with different slopes joined by a short knee. The fact that the cesium recombination coefficient is the same in the presence of a large excess of inert gas as in pure cesium vapor and remains unchanged over a wide range of ionization indicates that molecular ions do not play a significant role in cesium recombination. It is suggested that cesium recombination is effected mainly in three-body collisions between an ion and two electrons. The recombination coefficientsobserved for helium and argon are too large to be accounted for by analogous three-body collisions, however, and it is suggested that molecular ions participate in the inert gas recombination process. Orig. art. has: 2 formulas and 7 figures.

SUB CODE: 20 SUBM DATE: 18Jan65 ORIG.REF: 004 OTH REF: 008

Card 3/3

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

ACC NR: AP7003157 (A,N) SOURCE CODE: UR/0294/66/004/006/0745/0752

AUTHOR: Morculis, N. D.; Polushkin, I. N.

ORG: Kiev State University im. T. G. Shevchenko (Kievskiy gosudarstvennyy universitet)

TITLE: Investigation of a discharge plasma in helium and argon with admixture of cesium and potassium vapors

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 6, 1966, 745-752

TOPIC TAGS: plasma discharge, helium plasma, argon plasma, cesium, potassium

ABSTRACT: The article reports an experimental investigation of the physical properties of He-Cs, He-K, Ar-Cs, and Ar-K pulse discharges under admixture conditions, when their ionization is limited only by the atoms of the admixture. In these investigations, the pressure of the base inert gas (helium and argon) was constant and equal to 600 mm Hg, while the pressure of the admixtures (cesium and potassium vapors) was varied in the interval from 0.01 to 0.5 mm Hg; the density of the discharge current was in the region of $j = 4-70$ amps/cm^2. Such a plasma can be considered as a physical model of a mixed gas-plasma semiconductor with shock ionization and "hot" electrons. The article presents a description of the necessary conditions for obtaining a quasi-steady-state of the plasma and of the way in which it fills the discharge tube. Determinations were made of the electric field strength, the conductivity, the electron temperature, and

 UDC: 537.523.537.562

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ACC NR: AP7003157

the nature of the spectra of the plasmas obtained, under different experimental conditions. The article also describes several of the physical processes which take place in such a plasma. Orig. art. has: 4 formulas and 12 figures.

SUB CODE: 20/ SUBM DATE: 08Jul65/ ORIG REF: 010/ OTH REF: 010

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

L'VOV, D.V.; MORGULIS, P.S.; ABRAMOV, S.L.; GOL'HERTS, M.H.

Remarks on the question of the practical value of A.K.D'iachkov's works. Izv. AN SSSR Otd.tekh.nauk no.5:777-778 My '53. (MLRA 6:8)
(Bearings (Machinery)) (D'iachkov, A.K.)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

AUTHOR: Morgulis, P.S. Cand. Tech. Sc.

TITLE: Notes on safety valve design (Zamechaniya k raschetu predokhranitel'nogo klapana)

PERIODICAL: Energo Mashinostroenie, 1957, No.1, pp. 26-27, (U.S.S.R.).

ABSTRACT: After several brief theoretical considerations a new design of safety valve is briefly described in Fig. 2, p.27. This at present is being serially produced. No difficulties were experienced during an experimental operation of this valve.

ASSOCIATION:

Card 1/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

TITLE: Notes on safety valve design (Zamechaniya k raschetu predokhranitel'nogo klapana)

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, P.S., kand.tekhn.nauk

Form and height of lift of the closing part of safety valves; letter to the editor. Energomashinostroenie 4 no.3:39 Mr '58. (Valves) (MIRA 11:5)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, P.S., kand. tekhn. nauk; ABRAMOV, S.A., inzh.

Using thin-walled bearings with thin-layer lining in high-capacity engines. [Trudy] MVTU no.76:72-83 '58. (MIRA 11:5)

1. Kolomenskiy teplovozostroitel'nyy zavod im. V.V. Kuybysheva.
(Bearings (Machinery)) (Gas and oil engines)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, P.S., dotsent, kand.tekhn.nauk; LYNDA, A.S., kand.pedagogicheskikh nauk

Draft curriculum for the engineering and pedagogical faculty of a teachers college. Uch.zap.Kol.ped.inst.Politekh.ser. 4 no.1:9-12 '59. (MIRA 14:4)

(Teachers, Training of)
(Technical education--Curricula)

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, P.S., dotsent, kand.tekhn.nauk

Development of the concept "machine." Uch.zap.Kol.ped.inst. Politekh. ser. 4 no.1:57-60 '59. (MIRA 14:4)
(Machinery)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, P.S., dotsent, kand.tekhn.nauk; ROGACHEV, I.I., dotsent, kand. fiziko-matematicheskikh nauk

Programs of technical subjects taught in teachers colleges. Uch. zap.Kol.ped.inst. Politekh.ser. 4 no.1:87-94 '59. (MIRA 14:4)
(Teachers, Training of) (Technical education)

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

[illegible], F.E., [illegible]

Evaluating the degree of forcing of a diesel engine. Avtomobil'-
nostroenie [illegible] no.9:43 S '60. (MIRA 13:9)
(Diesel engines--Testing)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

S/262/62/000/011/021/030
I007/I252

AUTHOR: Morgulis, P. S.

TITLE: Choice of air supply system and supercharging unit characterics for the Д-45 (D-45) locomotive diesel

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk 42. Silovyye ustanivko, no. 11, 1962, 67, abstract 42.11.387. (In collection Gazoturbin nadduv dvigateley vnutr sgoraniyt., M., Mashgiz, 1961, 13–23)

TEXT A special exhaust manifold has been designed in which the kinetic energy of the exhaust gases and the free-discharge period are utilised for expelling residual gases and scavenging air from adjacent cylinders. As a result, the efficiency of a turbo-piston engine increased from 0.34 to 0.36. Further increase in the effectiveness of the air supply system may be obtained by recourse to a near-isothermal compression process in the supercharging unit. There are 7 figures and 8 references.

[Abstracter's note. Complete translation.]

Card 1/1

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

S/262/62/000/009/011/017
I007/I207

AUTHORS: Ivanov, G. I., Morgulis, P. S. and Romanenko, N. T.

TITLE: Computation charts for diesel-engine turbocharging units

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 42. Silovyye ustanovki, no. 9, 1962, 54, abstract 42.9.299. In collection "Gazoturbin nadduv dvigateley vnutr. sgoraniya", M., Mashgiz, 1961, 149-160

TEXT: A set of charts is presented for calculating the following parameters: sizes and rotational speed of the impeller of radial-flow superchargers; mean diameter and length of blades of the central turbinestage; and conditions for joint operation of engine and turbine. The method may be applied both to a selfcontained unit and to a diesel-powered set. The various stages in the use of the computation method are dealt with and methods of plotting and practical application of the charts are described. There are 4 references.

[Abstracter's note: Complete translation.]

Card 1/1

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, P.S., kand.tekhn.nauk

Letter to the editor. Energomashinostroenie 7 no.9:47-48 S '61. (MIRA 14:9)
(Diesel engines—Design and construction)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

AGRACHEV, G.I., kand.tekhn.nauk; MORGULIS, P.S., kand.tekhn.nauk

Approximate determination of the time required to put a marine diesel into reverse. Sudostroenie 27 no.9:30-36 S '61. (MIRA 14:11)

(Marine diesel engines)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

S/145/62/000/001/003/010
D262/D308

AUTHOR: Morgulis, P.S., Candidate of Technical Sciences, Docent

TITLE: Air supply for diesel locomotive turbo-piston engines

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye, no. 1, 1962, 48 - 56

TEXT: A study of the constructional and thermodynamic problems of air supply. The question of applying the expression $p_e c_m/\tau$ to estimate the boosting of diesel and turbo-piston engines, as proposed by P.S. Morgulis (Energomashinostroyeniye, 1960, no. 8) is discussed and it is stated that the problem of air supply and especially in the first place, the problem of high density of air charge are the most important. The results of investigations connected with the methods of cooling the supercharging air, and in particular with water spraying, conducted by the author, are mentioned. Four new schemes for air supply and gas distribution, not yet tested, are presented and analyzed. The main feature of scheme 1 is the changing of

Card 1/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

Air supply for diesel locomotive ...

compression ratio, of scheme 2 - the change of cycle (from four-stroke at start and low load to two-stroke at full load) and schemes 3 and 4 employ a new system of air supply with a small additional engine-driven compressor. The results of tests with the gas turbine supercharging for the two-stroke engines ≡ 23/30 (D23/30) conducted by the Kolomna plant are discussed and it is stated that new methods of controlled supercharging are being investigated. There are 5 figures and 1 table. The English-language reference reads as follows: Water spray for charge-cooling, Gas and Oil Power, 1961, no. 674.

ASSOCIATION: Kolomenskiy teplovozostroitel'nyy zavod i KPI (Kolomna Diesel Locomotive Plant and KPI)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, P.S., kand.tekhn.nauk; TSUKANOV, Ye.V.

Centennial of the work of the V.V. Kuibyshev Factory in Kolomensk.
Energomashinostroenie 9 no.11:46 N '63. (MIRA 17:2)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

TSUKANOV, Ye.V., inzh.; PORGULIS, P.S., kand. tekhn. nauk

Hundred years in the service of technical development.
Vest. mashinostr. 43 no.12:79-80 D '63. (MIRA 17:8)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, P.S.; PERFILOV, V.G.; KRUGLOV, M.G., doktor tekhn. nauk, prof., red.

[Turbochargers for diesel locomotive engines] Turbokompressory teplovoznykh dvigatelei. Moskva, Mashinostroenie, 1965. 146 p. (MIRA 18:7)

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L 6052-65 EWT(d)/EWT(m)/EWP(v)/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWP(1)/EWA(c)
EPA-5 Pz-6/Pr-4/Pu-4 IJP(c) JD/JG/WB/JW/JH
ACCESSION NR: AT5012069 UR/0000/65/000/000/0001/0008

AUTHOR: Morgulis, P. B. (Candidate of technical sciences) 30 B+1

TITLE: Some approaches to the improved design of turbocharged engines

SOURCE: Kolomenskiy teplovozostroitel'nyy zavod. Turboporshnevyye dvigateli (Turbine-piston engines). Sbornik statey. Moscow, Izd-vo Mashinostroyeniye, 1964, 1-42

TOPIC TAGS: two cycle engine, turbocharged diesel, dual stage supercharged (centrifugal bladed compressor, turbine driven compressor, crankshaft driven blower), supercharging air bypass, multistage channel regulation

ABSTRACT: The author discusses, in considerable detail, possible design modifications for two-cycle turbocharged engines, intended to enlarge the operating range of the engine, improve its pickup characteristics and raise the adaptability factor. Calculations and test data with the 12DN 23/30 engine demonstrated the advantages of a dual stage supercharging system, stage one consisting of a centrifugal bladed compressor with a gas turbine drive independent of the crankshaft, and stage two consisting of a crankshaft driven volumetric compressor of Roots type with air (or metered fuel-air mixture) bypass around the cooler) with a supercharging air bypass. [illegible] system injects the fuel

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ACCESSION NR: AT5012963

simply as the sole factor governing the possible expansion of the engine's operating range [illegible] known limits. Other tests served to verify the efficiency of systems employing [illegible] regulation of flow [illegible] relationship between [illegible] following factors [illegible]

ASSOCIATION: None

SUBMITTED: 04Jan65 ENCL: 00 SUB CODE: PR

NO REF SOV: 003 OTHER: 000

Card 2/2

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L 01159-66 EPF(n)-2/T-2/ETC(m)/EWP(t) WW

ACC NR: AP5025065 SOURCE CODE: UR/0286/65/000/016/0116/0116

AUTHORS: Morgulis, P. S.; Vasil'chenko, P. A.; Shifriu, M. G.; Repin, M. I.

ORG: none

B
51

TITLE: Method of increasing pick-up (acceleration) of diesel generators with gas turbine superchargers. Class 46, No. 174039

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 116

TOPIC TAGS: engine governor, supercharger, gas turbine, diesel engine

ABSTRACT: This Author Certificate presents a method for improving the pick-up of diesel generators with gas turbine superchargers by controlling the supply of exhaust gases to the turbine. To permit load variations without change in engine speed, the step-wise changes of turbine partiality (partial admission) are accomplished by supplying exhaust gases from one or several collectors to the turbine. The control is provided by a gas distributing valve which is activated according to engine load.

SUB CODE: PR/ SUBM DATE: 01Jun64

JW

Card 1/1 UDC: 621.436

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

L 02432-67 EWT(d)/EWT(m)/T-2/EWP(t) WW

ACC NR: AP6030624 (A) SOURCE CODE: UR/0413/66/000/016/0120/0120

INVENTOR: Khutaiyev, A. I.; Morgulis, P. S.; Kaplan, V. I.

ORG: none

TITLE: A method of starting a gas-turbine supercharged four-cycle diesel engine. Class 46, No. 185149. (Announced by the Kolomna Diesel Locomotive-Building Plant im. V. V. Kuybyshev [Kolomenskiy teplovozostroitel'nyy zavod])

SOURCE: Izobreteniya, promyshlennyy obraztsy, tovarnyye znaki, no. 16, 1966, 120

TOPIC TAGS: diesel engine, supercharged engine, turbosupercharged engine, engine starter system, GAS TURBINE ENGINE.

ABSTRACT: An Author Certificate has been issued for a method for starting a gas-turbine-supercharged diesel engine, in which the intake valve is activated by an auxiliary set of distributive cam plates. To improve the starting characteristics of the engine, the intake valve during the starting period is closed at each cycle when the piston is at BDC; when, however, rated engine output is achieved, the intake valve is closed when the crankshaft turns from BDC to angle of about 50°. [SA]

SUB CODE: 21/ SUBM DATE: 28Dec63/

Card 1/1 UDC: 621.436.12.052-57

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SHAMOV, A.N.; BODAZHKOV, V.A.; ZHIZHMOR, Ya.I., inzh., retsenzent; MORGUN, V.V., inzh., red.; MIKHEYEVA, E.N., red.izd-va; PETERSON, M.M., tekhn. red.

[Design and operation of high-frequency plants] Proektirovanie i ekspluatatsiia vysokochastotnykh ustanovok. Moskva, Mashgiz, 1963. 218 p. (MIRA 17:1)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

GLAZKOV, A. K.; MORGULIS, Ya. I.

Electric Power

Planning the power economy of petroleum refineries. Energ. biul., No. 6, 1952.

Monthly List of Russian Accessions, Library of Congress October 1952 UNCLASSIFIED

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

L 37933-66

ACC NR: AP6021822 SOURCE CODE: UR/0413/66/000/012/0114/0114

INVENTOR: Morgulis, Yu. R.; Drizo, V. I.

ORG: none

TITLE: Expansion coupling. Class 47, No. 182972 [announced by the Special Design Bureau No. 3 (Spetsial'noye konstruktivnoye byuro No. 3)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 114

TOPIC TAGS: coupling, expansion coupling

ABSTRACT: An Author Certificate has been issued for an expansion coupling consisting of 2 half-couplings connected by a spacer and a retainer with balls (see Fig. 1). To assure simultaneous compensation for the angular and radial misalignment of the shafts during their rotation and stopping, and also to transmit axial force between the shafts, each half-coupling is connected to the spacer by movable universal joints consisting of a bushing with a retainer placed in

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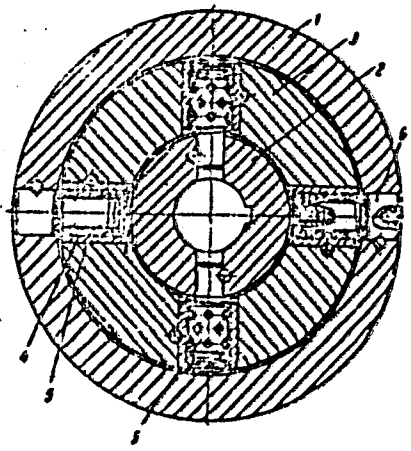
L 37936-66

ACC NR: AP6021822



the spacer and with springs at the butt end and pin-fastened to the half-couplings and connected with the bushing through the retainer. Orig. art. has: 1 figure. [WH]

Fig. 1. Expansion coupling

1 and 2 - Half-couplings; 3 - spacer; 4 - bushing; 5 - retainer; 6 - spring pin.

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

KOVALEVSKIY, Ye.S.; MORGULIS, Yu.B.; KRUGLI, V.K.; SHATILOV, A.I., inzhener, retsenzent; [illegible], kandidat tekhnicheskikh nauk, redaktor; MATVEYEVA, Ye.N., tekhnicheskiy redaktor.

[Small and medium power diesels] Dizel'nye ustanovki maloi i sredneĭ moshchnosti. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1957. 414 p. (MLRA 10:4)
(Diesel engines)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

26(4) PHASE I BOOK EXPLOITATION SOV/3046

Morgulis, Yu.B., Candidate of Technical Sciences

Dvigateli vnutrennego sgoraniya; teoriya, konstruktsiya i raschet (Internal Combustion Engines; Theory, Design, and Construction) Moscow, Mashgiz, 1959. 341 p. Errata slip inserted. 25,000 copies printed.

Reviewers: M.L. Livshits, Engineer, and N.N. Ivanchenko, Candidate of Technical Sciences, Curriculum Comittee, Moscow Tekhnikum of Marine Mechanics; Ed.: A.A. Bajentsyan, Engineer; Managing Ed. for Literature on General Technical and Transport Machine Building: V.I. Kubarev, Engineer; Tech. Ed.: A.F. Uvarova.

PURPOSE: The book is intended for students of machine-building tekhnikums specializing in the study of internal combustion engines.

COVERAGE: The book deals with the design and construction of internal combustion piston engines, chiefly diesels, produced in Soviet machine-building plants. Principles of thermodynamic

Card 1/12

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

VAKHTEL', V.Yu.; MOSGULIS, Yu.B.; BALYUK, B.K.

Investigating the structural rigidity of principal diesel engine parts. Trakt. i sel'khozmash. 30 no.11:5-8 N '60. (MIRA 13:12)
(Diesel engines)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, Yu.B., kand.tekhn.nauk; POVETKIN, G.M., inzh.

Increasing the capacity of diesel engines by turbocharging. Trakt. i sel'khozmash. 31 no.3:17-22 Mr '61. (MIRA 14:3)

1. Nauchno-issledovatel'skiy avtotraktornyy institut.
(Diesel engines)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

ZHEVAGO, K.A. Prinimal uchastiye MORGULIS, Yu.B.; BULATOV, S.I., red. izd-va; EL'KIND, V.D., tekhn. red.; UVAROVA, A.F., tekhn. red.

[High-speed diesel engines; design, assembly and operation] Bystrokhodnye dizeli; ustroistvo, montazh i ekspluatatsiia. Moskva, Mashgiz, 1962. 399 p. (MIRA 16:1)
(Diesel engines)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, Yu.B.; NISNEVICH, A.I.

All-Union Industry-Wide Conference of Tractor Builders. Trakt. i sel'khozmash. no.1:48, 3 of cover Ja '65.

(MIRA 18:3)

1. Gosudarstvennyy vsyuznyy nauchno-issledovatel'skiy traktornyy institut.

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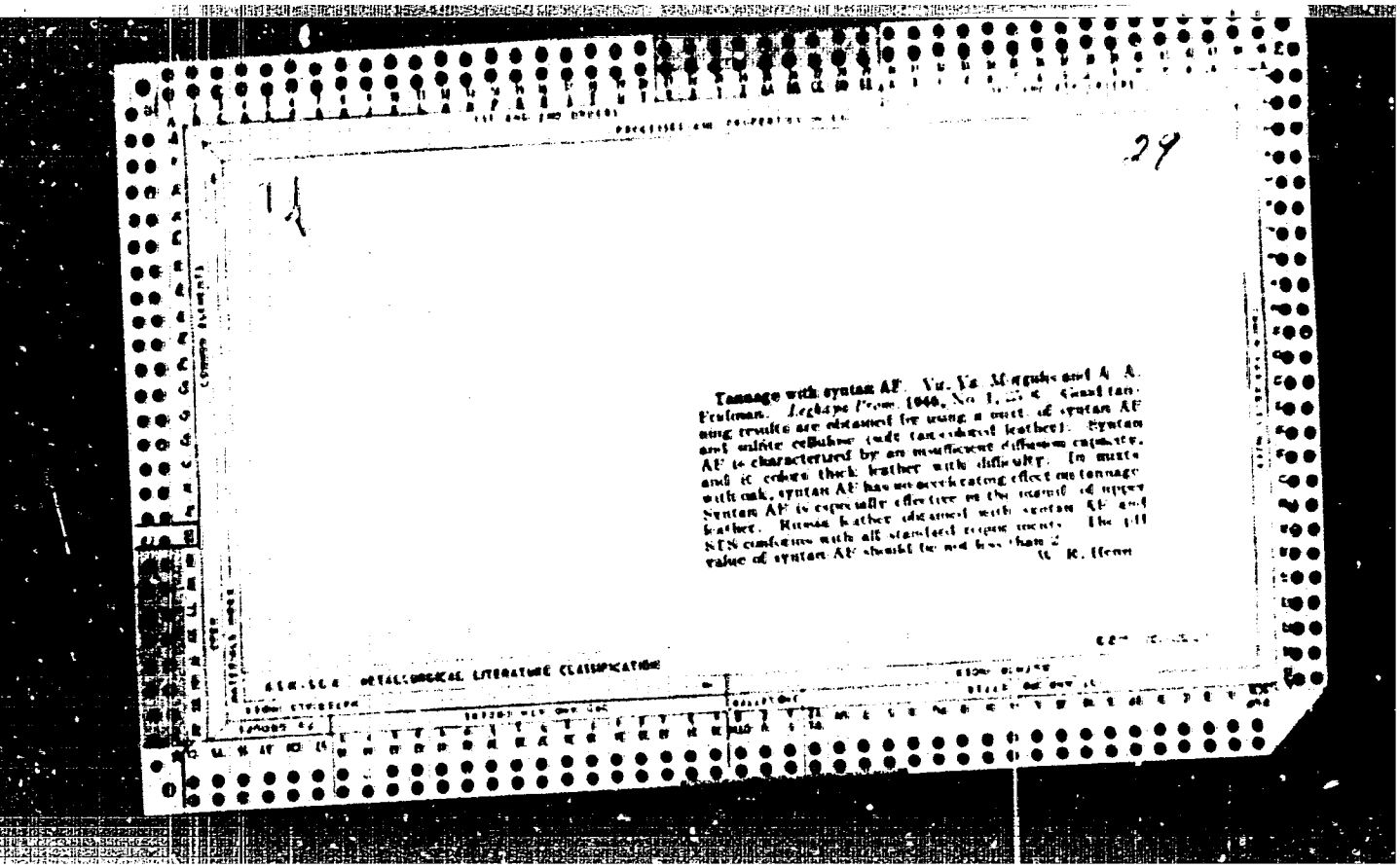

Tannage with syntan AF. Yu. Ya. Margulis and A. A. Fruiman. *Legkaya Prom.* 1946, No. 1, 21-4. Good tanning results are obtained for using a mixt. of syntan AF and sulfite cellulose (safe tan-colored leather). Syntan AF is characterized by an insufficient diffusion capacity, and it colors thick leather with difficulty. In mixts. with oak, syntan AF has an overtanning effect on tannage. Syntan AF is especially effective in the manuf. of upper leather. Russia leather obtained with syntan AF and SES conforms with all standard export tests. The pH value of syntan AF should be not less than 2.

G. R. Ilenn

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

[redacted], Yu. Yu. Cand. Tech. Sci.

Dissertation: "Technological Properties of Synthetic Tanning Agent AF." Moscow Technological Inst of Light Industry imeni L. M. Kaganovich, 15 May 47.

SO: Vechernyaya Moskva, May, 1947 (Project #17836)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, Yu.Ya., glavnyy inzhener; FRIDMAN, B.I., nachal'nik tekhnicheskogo otdela.

Utilizing internal potentialities at the Thälman leather factory. Leg.prom. 14 no.11:10-13 N '54. (MLRA 7:12)
(Leather industry).

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MCROULIS, Yu.Ya., inzhener.

Quantitative characteristic of the density of the grain. Leg.prom.14 no.2:25-27 F '54. (MLRA 7:5)
(Leather--Standards)

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, Yu.Ya., kandidat tekhnicheskikh nauk.

Stretching of chrome leather. Leg.prom [16] no.11:32-33 N '56.
(MLRA 10:1)

1. Glavnyy inzhener zavoda imeni Tel'mana.
(Leather industry)

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGULIS, Z.M. (Kiyev)

There are no borders to friendship. Med. sestra 22,no.4.64:Ap'63.
(MIRA 16:4)

(MEDICAL PERSONNEL)

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

Addition of petroleum soap to hard water for better wetting of dispersed dust. V. V. Nevlin and A. F. Margunin. Neftyanoe Khoz. 1951, No. 1, 31-6.—The dust of drills in mines is laid by means of water to which petroleum soap is added as wetting agent. For greatest effectiveness hard water must be softened. On softening with trisodium phosphate a gelatinous mass of alk. earth soap formed in the water and clogged the lines and drill passages. Softening the water by passing it through a base-exchange material removed this difficulty. M. Hirsch

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, A. P.

2995. ADDITION OF "PETROLEUM SOAP" ($C_{n}H_{2n-1}COONa$) TO HARD WATER TO IMPROVE WETTING OF DISPERSED DUST. Rodin, V. V. and Morgun, A. P. (Gornyi Zh.(Min. J.), Jan. 1951, 54-55).

This substance was tested as a wetting agent in the Krivoi Rog iron mines, where the rock contains quartz and the water is hard. 0.10 to 0.16% was added to water forced down drill holes. Dust produced was 1.9 times less in weight than with untreated water. The water had to be softened by the base exchange process, since water softened with lime and soda forms a sticky emulsion with petroleum soap. Petroleum soap is plentiful but the unpleasant smell should be neutralized with aromatic compounds. (L).

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MORGUN, A.

Inertia starting mechanism for separator brush rolls. Muk.-elev. prom.22 no.10:20-21 O '56. (MLRA 9:12)

1. Gor'kovskiy mashinostroitel'nyy zavod imeni Vorob'yeva.
(Grain--Cleaning)

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, A., inzhener.

Improved mechanism for separator brush rolls. Mek.elev.prom. 23 no.9:10-12 S '57. (MIRA 10:11)

1. Gor'kovskiy mashinostroitel'nyy zavod im. Vorob'yeva.
(Separators (Machinery))

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

SAVVIN, A.; MORGUN, A.

Operation and improvement of mobile ZA-40 grain cleaning installations. Muk.-elev.prom. 24 no.3:6-9 Mr '58.
(MIRA 12:9)

1. Glavnyy inzh. Gor'kovskogo mashinostroitel'nogo zavoda im. Vorob'yeva (for Savvin). 2. Nachal'nik eksperimental'nogo byuro Gor'kovskogo mashinostroitel'nogo zavoda im. Vorob'yeva (for Morgun).
(Grain--Cleaning)

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

DEMIDOV, A., inzh.; DEMIN, G., insh.; LUTKIN, N., insh.; MORGUN, A., insh.

Adjustment and regulation of the ZA-40 grain cleaning machine. Muk-elev. prom. 24 no.6:17-19 Je '58. (MIRA 11:7)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov yego pererabotki (for Demidov, Demin, Lutkin). 2.Gor'kovskiy mashinostroitel'nyy zavod (for Morgun).
(Grain--Cleaning)

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, A., inzh.; DEMIDOV, A., kand. tekhn. nauk.

Eccentric vibrators for machines with reciprocating vibrations of screen bodies. Muk.-elev. prom. 24 no.12:12-15 D '58. (MIRA 12:1)

1.Gor'kovskiy mashinostroitel'nyy zavod imeni Vorob'yeva (for Morgun). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov ego pererabotki (for Demidov).
(Grain-handling machinery) (Vibrators)

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, A., inzh.; SHCHERBAKOV, V., inzh.; ZUBKOV, V., inzh.; SHMKALIN, V., inzh.

Rubber cleaner for separator sieves. Muk.-elev.prom. 25 no.7: 16-17 Jl '59. (MIRA 12:11)

1. Gor'kovskiy mashinostroitel'nyy zavod im. Vorob'yeva (for Morgun, Shcherbakov). 2. Gor'kovskiy mel'nichnyy kombinat No.1 (for Zubkov, Smekalin).
(Sieves)

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, G.O.; LIPKINA, A.V.

Reduction of 5-nitroacenaphthene to 5-aminoacenaphthene in an water-alcohol medium by hydrochloric acids and zinc. Nauk.zap. L'viv.un. 21:128-129 '52. (MLRA 10:7)
(Acenaphthene) (Hydrochloric acid) (Zinc)

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

ZAMLYANSKIY, N.I.; MOROZ, G.Ye.

Use of acenaphthene in the preparation of azo dyes. Part 1.
Nauk. zap. L'viv. un. 13:113-116 '49. (MIRA 12:10)

1.Kafedra organicheskoy khimii L'vovskogo gosudarstvennogo universiteta imeni I. Franko.
(Acenaphthene) (Azo dyes)

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, G.Ye.

Chem 9
(3)

Condensation of ethylene oxide and ammonia on mixed chromium-aluminum catalysts. M. S. Malinovskii and G. E. Morgun (Lvov State Univ.). *Zhur. Priklad. Khim.* 25, 333-7(1952).—Mixts. of ethylene oxide (I) and NH_3, in the approx. molar proportions of 2:1, 3:1, and 5:1, were passed, at 400 and 450°, over $Cr_2O_3 + Al_2O_3$ catalysts mixed in the wt. ratios 1:5, 1:1, and 1:10. Examples of data are: At 400°, 35.1 g. I, 4.15 g. NH_3, Cr_2O_3:Al_2O_3 (1:5); rate of feed of I 0.13 g./min.; yield (relative to I) oil 29.3%, aq. layer 23.9%, crystals 5.08%; fractionation of condensate, b. 70-90° (30.6%), 90-106° (7.4), 106-40° (18.0), 140-210° (24.5). At 450°, 34.0 g., 4.3 g., 1:1; 0.13; 30.9, 24.4, 7.1; fractionation, b. 60-90° (28.0%), 90-106° (9.8), 106-40° (16.8), 140-210° (23.2). At 460°, 35.2 g., 2.9 g., 1:1; 0.23; 24.7, 20.5, 5.1; fractionation, b. 60-90° (29.2%), 90-106° (9.4), 106-40° (15.3), 140-210° (21.2). Analyses show that on a 1:5 catalyst, the products are pyrrole and pyridine derivs., with some EtOH. On 1:1 catalyst, pyridine disappears, and only 5-membered rings are found in the product, in smaller amts. than on 1:5 catalyst. On the 1:10 catalyst, the amt. of pyridine deriv. is increased, and pyrrole derivs. decreased. The most favorable catalyst compn. for the production of 5-membered ring compds. is 1:5. N. Thon

A. V-48
10/1954
Phys Chemistry

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USSR.

Oleda oxides. VI. Condensation of aliphatic alkyls with ammonia on a mixed chromium-aluminum catalyst. M. S. Malinovskii and O. S. Mogrun (Univ., Kiev). *J. Appl. Chem. U.S.S.R.* [illegible] (Engl. translation); *Zhur. Prikład. Khim.* 21, 333–7; cf. C.A. 48, 2580b, 5000i. —Compds. of the pyrrole and pyridine series, together with EtOH, were obtained if a Cr-Al oxide catalyst was used. If the 2 oxides were present in equal proportions, only 5-membered heterocyclic compds. and no pyridine was found. Oxide mixts. with a ratio of 1:20 Cr-Al increased the quantity of pyridine bases and reduced the pyrrole compds. The most favorable ratio for 5-membered heterocyclic compds. is 1 Cr oxide:5 Al oxide. F. Schoenberger

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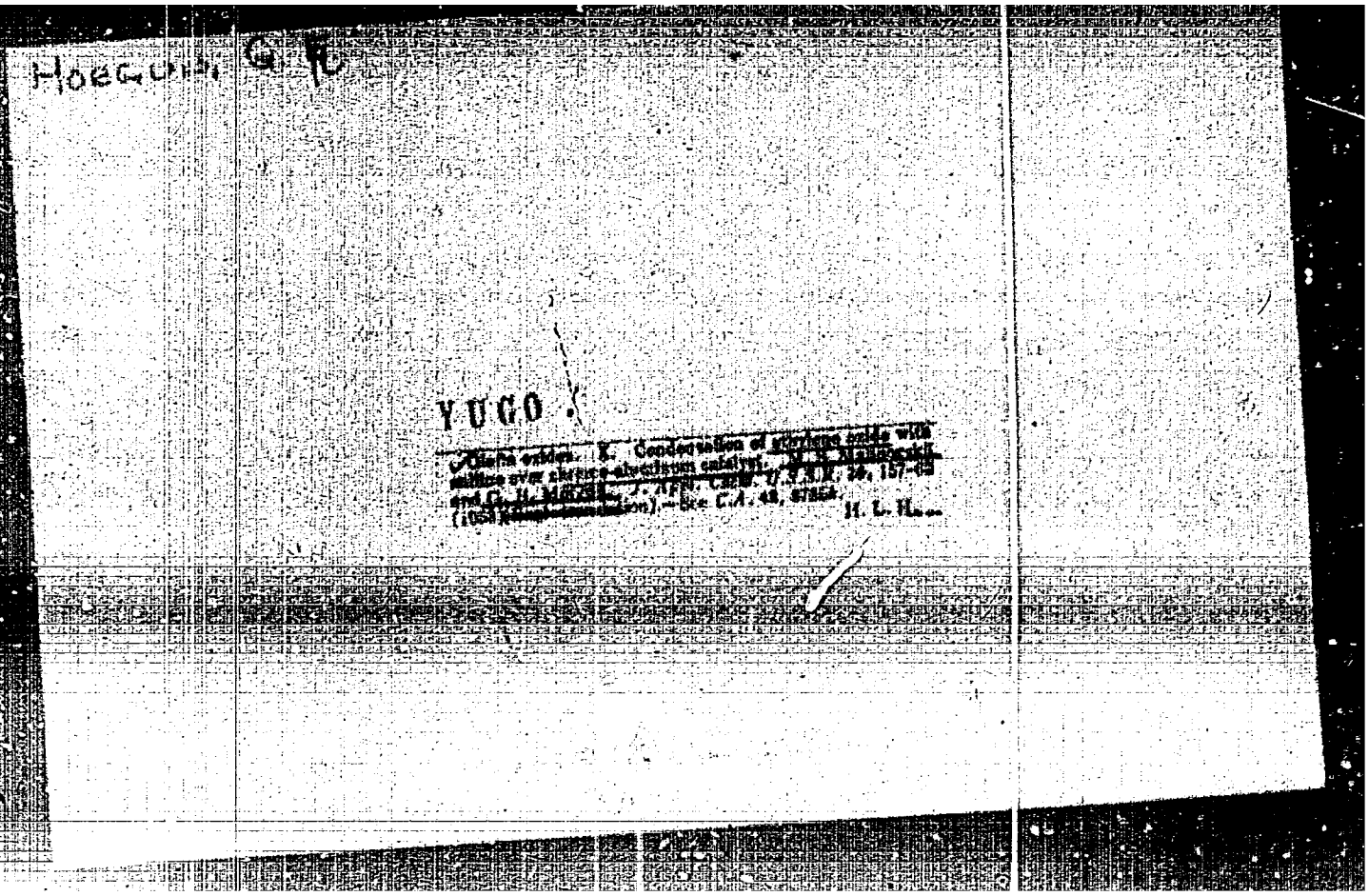

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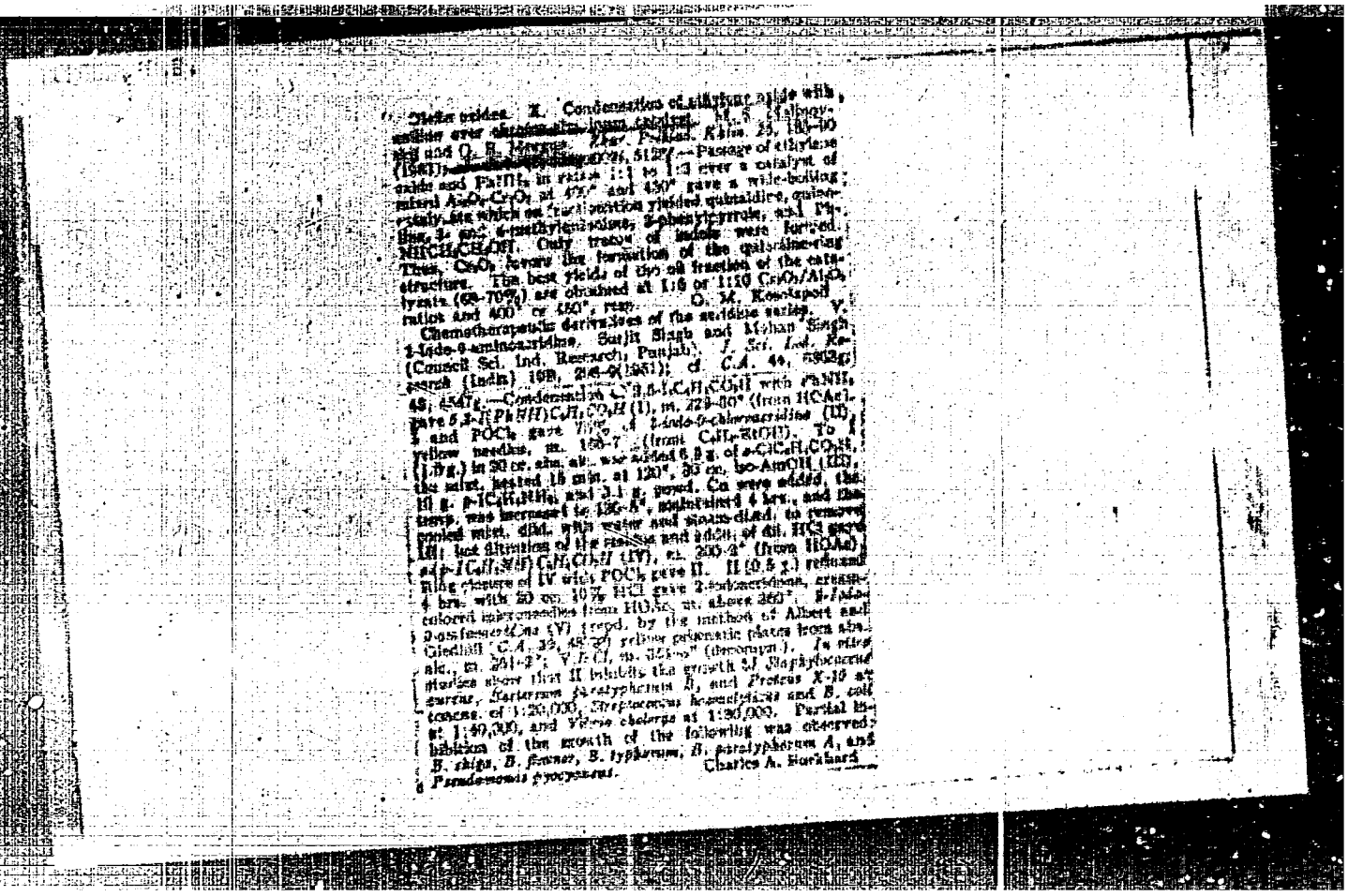

Oxide oxides. X. Condensation of ethylene oxide with ... sulfide over chromium-iron catalyst. ... Khim. Zh. Ukrayiny 25, 180-90 (1959) and C. A. 53, 5127f.—Passage of ethylene oxide and PaH_2 in ratio 1:1 to 1:3 over a catalyst of ... activated AsO_3-Cr_2O_3 at 420° and 430° gave a wide-boiling ... crystallizing fraction yielded quinaldine, quinoline, ... ling, 3- and 4-methylquinolines, 2-phenylpyrrole, and 1-... $NHCH_2CH_2OH$. Only traces of indole were formed. ... structure. The best yields of the oil fraction of the catalysates (68-70%) are obtained at 1:6 or 1:10 Cr_2O_3/Al_2O_3 ratios and 400° or 450°, resp. O. M. Kosikopoff

Chemotherapeutic derivatives of the acridine series. V. 9-Hide-9-aminoacridine. Surjit Singh and Mohan Singh. (Council Sci. Ind. Research, Punjab). *J. Sci. Ind. Research (India)* 19B, 246-9(1961); cf. *C.A.* 44, 5902g; 48, 4547g.—Condensation of 2,3-$(C_4H_4)C_6H_3CO_2H$ with $PhNH_2$ gave 2,3-$(PhNH)C_6H_3CO_2H$ (I), m. 229-30° (from HOAc). I and $POCl_3$ gave 9-chloro-9-hide-9-chloroacridine (II), yellow needles, m. 150-7° (from C_6H_6-ROH). To I (1.9 g.) in 20 cc. abs. alc. was added 0.9 g. of *o*-$ClC_6H_4CO_2H$, the mix. heated 15 min. at 120°, 30 cc. iso-AmOH (III), ... g. *p*-$ClC_6H_4NH_2$, and 3.1 g. powd. Cu were added, the ... temp. was increased to 130-4°, maintained 4 hrs., and the ... cooled mix. dild. with water and steam-dista. to remove ... last filtration of the residue and addn. of dil. HCl gave ... *o,p*-$ClC_6H_3(NH)C_6H_3CO_2H$ (IV), m. 200-4° (from HOAc). Ring closure of IV with $POCl_3$ gave II. II (0.5 g.) refluxed 4 hrs. with 50 cc. 10% HCl gave 2-chloroacridone, crystd. from HOAc, m. above 360°. *N*-Phenyl-2-aminoacridine (V) (prepd. by the method of Albert and Gledhill, *C.A.* 39, 4870) yellow prismatic plates from abs. alc., m. 201-2°; V·HCl, m. 325-6° (decompn.). *In vitro* studies show that II inhibits the growth of *Staphylococcus aureus*, *Salmonella paratyphosa B*, and *Proteus X-19* at ... concns. of 1:20,000, *Streptococcus hemolyticus* and *B. coli* at 1:40,000, and *Vibrio cholerae* at 1:80,000. Partial inhibition of the growth of the following was observed: *B. shiga*, *B. flexner*, *B. typhosum*, *B. paratyphosum A*, and *Pseudomonas pyocyanea*.

Charles A. Burkhard

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

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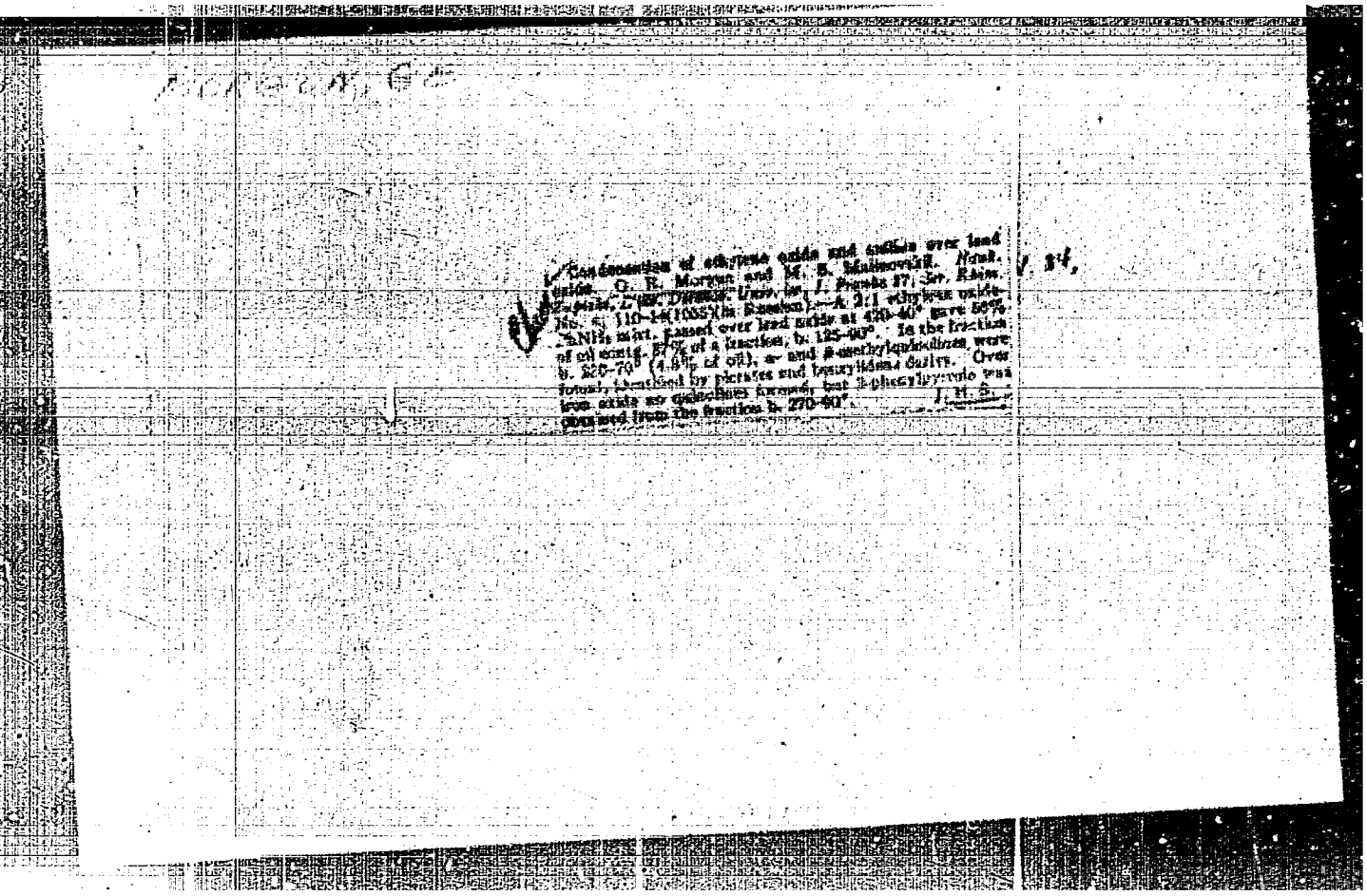

Condensation of ethylene oxide and sulfur over lead oxide. O. R. Morgan and M. B. Mallonee. Natl. Aniline & Chem. Co., Inc., Buffalo, N. Y. J. Franklin Inst., 257, 267-71 (1954). (In English).—A 2:1 ethylene oxide-S mixt. passed over lead oxide at 120-40° gave 50% of a fraction, b. 125-90°. Is the fraction of oil consists of (4.6% of oil), α- and β-methylpolysulfides, were b. 220-70° (4.6% of oil), α- and β-methylpolysulfides, were found, identified by picrates and benzylidene derivs. Over lead oxide at 270-90°, but β-chloroethyl-mercaptan was obtained from the fraction b. 270-90°. J. M. S.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MOIGUN, G.Ye.; MALINOVSKIY, M.S.; GLUSKHOVA, L.V.

Formation of heterocyclic compounds from amines and ethylene glycol. Ukr.khim.zhur. 28 no.7:852-854 '62. (MIRA 15:12)

1. L'vovskiy gosudarstvennyy universitet im.Iv.Franko.
(Heterocyclic compounds) (Amines) (Ethylene glycol)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

KHARITONOV, V.M.; MORGUN, L.A.

Determining the characteristics of titanium dioxide suspensions.
Khim.volok. no.2:20-23 '62. (MIRA 15:4)

1. Klinskiy kombinat.
(Titanium oxides) (Suspensions (Chemistry))

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2

L 51525-65 EWT(m)/EWP(j)/T Pc-4; [illegible]
ACCESSION NR: AP5015300 UR/0286/65/[illegible]/0069/0069
678.71/74

21
B

AUTHOR: Korshak, V. V.; Mozgova, K. K.; Zaiechkina, A. P.; Kharitonova, V. N.; Got'ye, T. N.; Karpova, G. D.; Morgun, L. A.

TITLE: A method for producing polyamide fiber. Class 39, No. 170672

SOURCE: Byulleten' izobretenii i tovarnykh znakov, no. 9, 1965, 69

TOPIC TAGS: polyamide resin, thermal stability, methacrylate, acrilic acid

ABSTRACT: This Author's Certificate introduces: 1. A method for producing polyamide fiber by polymerization of ε-caprolactam. A copper salt of the copolymer of methylacrylate and acrylic acid is added to the monomeric ε-caprolactam to improve the resistance of the fiber to heat and light. 2. A modification of this method in which the amount of copper salt added is 0.01%.

ASSOCIATION: none

SUBMITTED: 22Mar62 ENCL: 00 SUB CODE: OC, OC

Card 1/1 NO REF SOV: 000 OTHER: 000

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MOSGUN, M. I.

Viticulture

Improve supply of materials and equipment to the state farms. Vin. SSSR. 12, no. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, September 1952, Uncl.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, N.G.

Testing the hydraulic clutch in the KhSTZ-NATI tractor. Sborn.trud. lab.prob.bystr.mash. 3:188-204 '53. (MLRA 9:9)
(Tractors--Transmission devices)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, N. G. Dec Cand Tech Sci -- (diss) "Study of the operating process of the turbocouplings." Khar'kov, 1957. 16 pp 20 cm. (Min of Higher Education Uk SSR. Khar'kov Polytechnical Inst im V.I. Lenin), 100 copies

(KL, 21-57, 102)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

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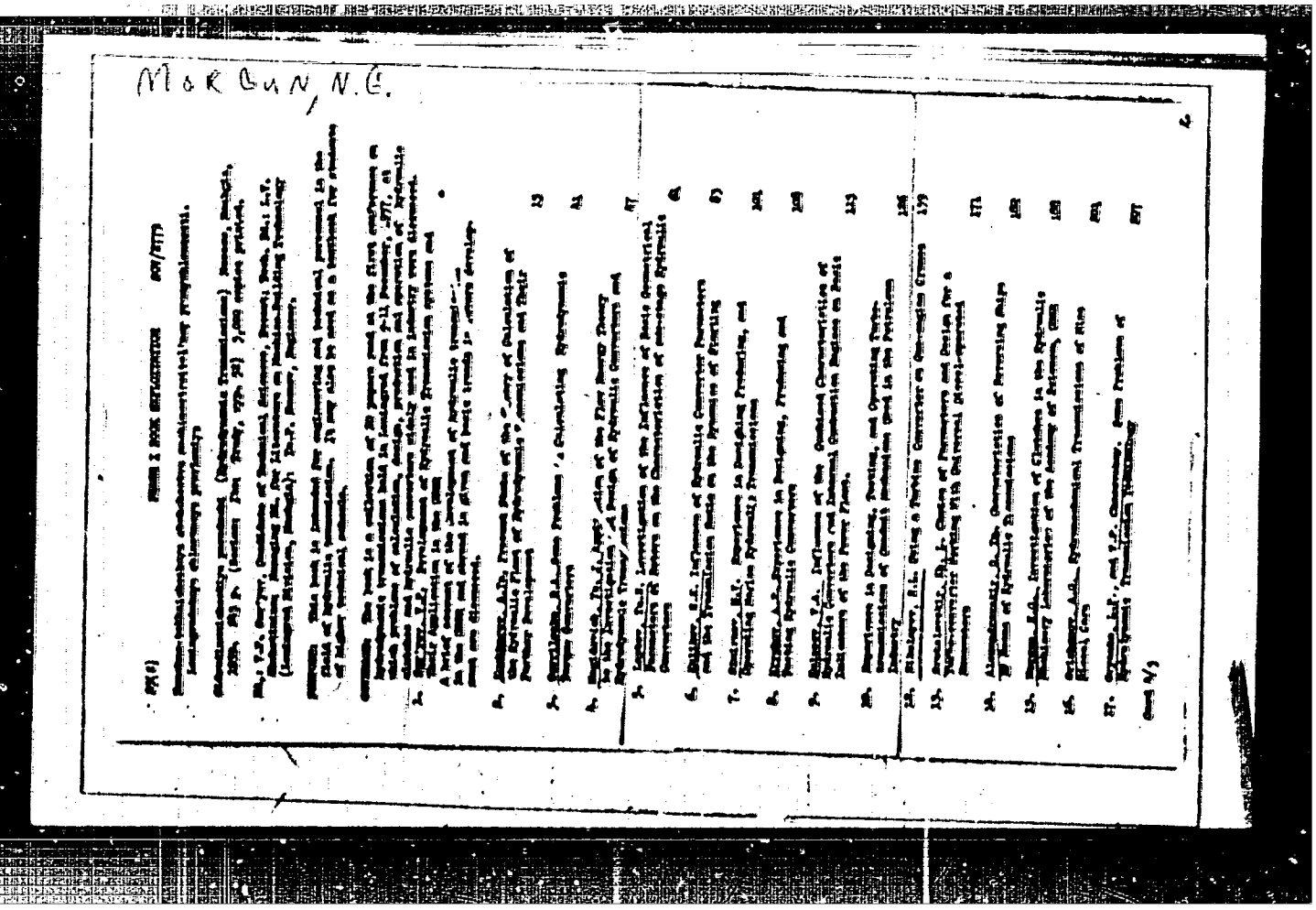

MARGUN, N.G.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, E.G.

Investigating clutches in the Laboratory of Hydraulic Machines of the Academy of Sciences of the Ukrainian S.S.R. [Izd.]
LONITOMASH 52:188-200 '59. (MIRA 12:12)
(Clutches (Machinery)--Testing))

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

KOROTKOV, A. A., kand. tekhn. nauk; MORGUN, N. G., kand. tekhn. nauk

Experimental investigation of external characteristics of a hydrodynamic clutch with discharge openings. Vest. mashinostr. 42 no.12:19-22 D '62. (MIRA 16:1)

(Clutches(Machinery))

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, N.G., inzh.; CHERNYSHENKO, A.A., inzh.

Hydrodynamic clutch-brakes. Gidr. mash. i gidr. no.1:172-179 '65.
(MIRA 18:12)

1. Khar'kovskiy filial Instituta mekhaniki AN UkrSSR.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, N.S.

Hydrodynamic coupling with radial rotary blades; Sber.trud.Lab.probl. bystr. nash. no.5:149-166 '55. (MLRA 9:2)
(Oil hydraulic machinery)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, P.A., inzh.

Simplest means of laying cold asphalt concrete. Avt. dor. 24 no.7:30 Jl '61. (MIRA 14:7)
(Asphalt concrete)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, F. A., podpolkovnik

Cold asphalt concrete on automobile highways. Tyl i snab. Sov. Voor. Sil. 21 no.8:72-75 Ag '61. (MIRA 14:12)
(Roads, Concrete)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

GANZ, S.N., kand. tekhn. nauk; GLOZMAN, L.P., inzh.; PAVLOVICHENKO, V.D., inzh.; MORGUN, V.S., inzh.

Using packing composed of filled flouroplastic materials on oxygen compressors. Khim. i neft. mashinostr.no.5:39 N '64 (MIRA 18:2)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, V.N., inzhener.

Experience in the use of the KVTS-15-8 boilers on river craft.
Mekh.transp. 15 no.12:21-22 D '56. (MLRA 10:2)
(Boilers, Watertube)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUN, Vladimir Nikiforovich; IVANOV, A.P., inzhener-kapitan 2 ranga, red.; SRIBNIS, N.V., tekhn. red.

[Diesel-engine mechanic]Slesar'-dizelist. Izd.2., dop. Moskva, Voenizdat, 1963. 559 p. (MIRA 16:3)
(Diesel engines--Maintenance and repair)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

SOV-125-58-8-8/16

AUTHORS: Kazimirov, A.A., Morgun, V.P., Olifer, G.O., Ivanushkin, G.Ya., Kapustyanov, Ye.V., Svinarenko, I.T. and Tyagun, A.A.

TITLE: Durability of Mass-produced Hatches of Railway Gondola Cars While Loading Under Pressure (Prochnost' seriynykh kryshek lyukov zheleznodorozhnykh poluvagonov pri udarnoy nagruzke)

PERIODICAL: Avtomaticheskaya svarka, 1958, Nr 8, pp 46-59 (USSR)

ABSTRACT: The existing hatches of gondola cars in the USSR are unsatisfactory and cause considerable losses of coal in railroad transport. Hatches of 60- and 93-ton cars produced by Uralvagonzavod and the Kryukov Car Building Plant were experimentally tested and deficiencies of their design were revealed. As a result of the experiments, new hatch designs were developed. Several variations are suggested composed of bent, thin-walled profiles. The proposed hatches are rigid, lighter, and more durable than the hatches presently in use. There are 6 diagrams, 5 graphs, 2 tables and 2 Soviet references.

Card 1/2

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

SOV-125-58-8-8/16

Durability of Mass-produced Hatches of Railway Gondola Cars While Loading Under Pressure

ASSOCIATIONS: Institut elektrosvarki imeni Ye.O. Patona, AN USSR (Institute of Electric Welding imeni Ye.O. Paton, AS UkrSSR) Kryukovskiy vagonostroitel'nyy zavod (Kryukov Car Building Plant)

SUBMITTED: May 12, 1958

1. Gondolas--Equipment 2. Hatches--Design

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

18(5,7), 32(3) SOV/125-59-7-9/19

AUTHOR: Kazimirov, A.A., Olifer, G.O., Morgun, V.D., Blagodatskiy, R.I., Portnoy, M.D. and Tyalin, V.V.

TITLE: Strength of Hatch Covers for Open Railroad Freight Cars Produced by Spot Contact Welding

PERIODICAL: Avtomaticheskaya svarka, 1959, Nr 7, pp 67-77 (USSR)

ABSTRACT: The different types of hatch covers are envisaged by the authors for production on a large scale. The first type is made of steel sheets 5 mm thick and has one longitudinal supporting beam in the middle of the cover. The second type is made of sheets 4 mm thick and is provided with two beams. Both types are produced by the method of spot contact welding. In the experimental stage, both types of covers were thoroughly tested and the following conclusions about their properties were drawn: 1) The new covers can stand 5-7 times bigger strain than the covers used up to now (serial production); 2) Their weight is 161, respecti-

Card 1/3

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

Strength of Patch Covers for Open Railroad Freight Cars Fastened by Spot Contact Welding

vely 91 kg, less than that of the conventional metal type; 3) The labor used in manufacturing them is by 15% smaller than it is with the metal type of covers; 4) less weld material is required; 5) their repair is less complicated. The higher cost of material (steel sheets) used for making them is fully covered thanks to the saving of labor and spending of expenses for purchasing of welding material in large quantities, as well as owing to cutting down outlays required for their repair. The exploitation of railway freight cars equipped with the new type patch covers provides an economy which rises in proportion with the number of cars using them. There are 3 tables, 3 photographs and 1 Soviet reference.

ASSOCIATION: 1) Ordena trudovogo krasnogo znameni Institut elektrosvarki imeni Ye.O. Patona AN USSR (Order of the Red Banner of Labor, Institute of Electric Welding, AS

Card 2/3

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

Strength of Hatch Covers for Open Railroad Freight Cars Produced by Spot Contact Welding

UkrSSR imeni Ye.O. Paton)
Ordena Lenina, krasnogo znameni, otechestvennoy voyny I stepeni, trudovogo krasnogo znameni Uralskiy vagonostroitel'nyy zavod (Order of Lenin, the Order of the Red Banner, Class I Order of the Patriotic War, and Order of the Red Banner of Labor Ural Car-Building Plant)

SUBMITTED: March 31, 1959

Card 3/3

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

KAZIMIROV, A.A.; MORGUN, V.P.; OLIFER, G.O.; IVANUSHKIN, G.Ya.; KAPUSTYANOV, Ye.B.; SVINARENKO, I.T. TYAGUN, A.A.

Strength of mass-produced trap gates for railroad gondola cars under the effect of shock loads. Avtom. svar. 11 no.8:46-59 Ag '58. (MIRA 11:10)

1.Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im. Ye.O. Patona AN USSR (for Kazimirov, Morgun, Olifer). 2.Kryukovskiy vagonostroitel'nyy zavod (for Ivanushkin, Kapustyanov, Svinarenko, Tyagun).

(Railroads--Cars--Fittings)

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[illegible]/EW/EM/HW

ACCESSION NR: AP4039183 S/0314/64/000/005/0039/0040

AUTHOR: Ganz, E.N., (Candidate of technical sciences), Glozman, L.F., (Parkhomenko, V.P., Morgun, V.S., (Engineers)

TITLE: Application of packings made of impregnated fluoroplasts in oxygen compressors

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no 5, 1964, 39

TOPIC TAGS: packing, fluoroplast packing, carbon impregnated fluoroplast, oxygen compressor

ABSTRACT: In 3RK 20/30 double-action compressors, the required tightness was not provided by asbestos-impregnated asbestos or pure fluoroplast-4. A new composition consisting of fluoroplast-4 with 18% colloidal graphite was therefore worked out by the Dnepropetrovskiy khimiko-tekhnologicheskiy institut (Dnepropetrovsk Chemical-Technological Institute). The plunger packing consists of internal fluoroplast rings, a gasket of the same material prevents gas flow from the packing box to the plunger, and pressure is ensured by the oxygen in the machine. The water is supplied in the same way as for the old packing. The first stage packing does not have a duct for the water supply, which is available for the second stage. The compressor reached a

Card 1/2

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ACCESSION NR: AP4049183

capacity of 690 m^3/hr. with the new packing. Tests were made with oxygen at a delivery temperature of 70C, sliding speed of 3.75 m/sec, first stage suction pressure of 1.3 and second stage pressure of 7 atm, the delivery pressure being 1 and 30 atm, respectively. Gas leakage did not exceed 5 m^3/hr. The service life of the new packing is 2,000 hours. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MT, IE

NO REF SOV: 000 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

S/196/62/000/010/030/035
E194/E155

AUTHORS: Morgun, V.V., and Tsodikov, G.D.

TITLE: An electronic invertor for induction heating at a frequency of 10 - 30 kc/s

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.10, 1962,15, abstract 10 K81. (In the Symposium 'Vysokochastotn. elektrotermich. ustanovki' (High-frequency Electro-thermal installations), M.-L., Gosenergoizdat, 1961, 49-55).

TEXT: The operating principles of an electronic invertor are described, with a diagram of an experimental 60 kW invertor based on two tubes type GU-22A (GU-22A). Curves are given of current, voltage, power, efficiency and frequency as functions of time when heating cylindrical specimens of various diameters. The efficiency remains high if the duration of the transient process resulting from changes in the load parameters is much less than the steady-state time, which can be achieved when melting and in continuous-sequence heating in hardening and forging.

Card 1/1 [Abstractor's note: Complete translation.]

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

L 26710-66 FBD/EWT(1)/EWP(e)/EWT(m)/EEC(k)-2/T/EWP(k)/EWA(h) IJP(c) WG/WH

ACC NR: AP6015591 SOURCE CODE: UR/0368/66/004/005/0403/0409

AUTHOR: Morgun, Yu. F.; Filipovich, V. A.

ORG: none

TITLE: Comparison of the parameters of ruby and neodymium lasers with pulsed Q-switching

SOURCE: Zhurnal prikladnoy spektroskopii, v. 4, no. 5, 1966, 403-409

TOPIC TAGS: laser, ruby laser, laser emission, Q factor, resonator Q factor

ABSTRACT: An investigation was made of a ruby laser operating in a pulsed Q-switching mode. Q-switching was controlled by rotating the prism of total internal reflection. The giant pulses obtained from the ruby laser differed from the pulses of the neodymium laser by their parameters. A neodymium laser generates a single pulse at a prism rotation speed of 25,500 rpm and a pumping energy of 2020 joules, while the ruby laser with the same rotation speed and a smaller pumping energy (1520 joules) generates 2—3 pulses which diminish in power. The parameters of ruby and neodymium lasers operating under similar conditions were compared. Neodymium glass rods and ruby rods with identical dimensions were used. The illuminator, the rotating prism, and the electrical and measuring parts of the installation in both cases were the same. The prism rotated at 24,000 rpm. The optimum mirror from the emergence side in the neodymium laser had a reflection coefficient of 60% and in the ruby laser,

Card 1/2 UDC: 621.375.9

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ACC NR: AP6015591

42%. The investigations showed that the rate of resonator Q-switching, which determines the character of the laser emission, depends not only on the rotation speed of the prism but also on the optical properties of the active substance. Orig. art. has: 4 figures. [JA]

SUB CODE: 20/ SUBM DATE: 19Jul65/ ORIG REF: 007/ OTH REF: 002/ ATD PRESS: 4258

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

KORGUN, Ye.G.

Thermostabile components of complement (C^3 and C^4) in different kinds of animals. Mikrobiol.zhur. 9 no.2/3:71-80 '48. (MLRA 9:9)

1. Iz otdela immunologii (zav. otdelom - N.N.Siretinin) Instituta mikrobiologii imeni akademika D.K.Zabolotnogo Akademii nauk USSR.
(COMPLEMENTS (IMMUNITY))

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"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUNOV, Yu.G.

Upper Paleozoic sediments in North Ossetia (central Caucasus). Izv. AN SSSR. Ser. geol. 30 no.7:108-112 Jl '65. (MIRA 18:7)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, Moskva.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUNOV, Yu.V., polkovnik

There can be no routine approach. Vest.Vozd.Fl. no.2:15-16 F '61.
(MIRA 14:7)
(Aeronautics, Military—Observations)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135130007-0

MORGUNOVA, A.M.

Changes in the color sedimentation test of urine during the surgical treatment of congenital pyloristenosis in children. Lab. delo 8 no.2: 50-51 F '62. (MIRA 15:2)

1. Pediatricheskaya klinika (zav. - prof. M.I.Olevskiy) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta.
(URINE--ANALYSIS AND PATHOLOGY) (PYLORIC STENOSIS)

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Uropepsin indices in newborn infants. Pediatriia 41 no.11:
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1. Iz detskoy kliniki (zav. - prof. M.I. Olevskiy) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta (dir. P.M. Leonenko).

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AUTHORS: Pudovkina, O.I., Kireyeva, M.V., Morgunova, E.M.

TITLE: On the Mineralogical Composition of the Calcined Mass in the Production of Bichromate (O mineralogicheskom sostave prokalennoy massy v proizvodstve khrumpika)

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ABSTRACT: The calcined mass obtained in the production of chromium is investigated here as to its metal content. In all samples large yellow crystals of pure sodium chromate were detected. Crystals with another refraction index were identified as calcium chromate. Table 2 shows the chemical analysis of the various samples. An aqueous extraction contained calcium chromate amounting to 2 - 4% of the total chromate content. The insufficient amount of soda in the charge and the specific conditions of calcination do not allow the reaction of sodium chromate formation to proceed to completion. A considerable percentage of the chromium remains included within other minerals causing losses of chromium in the production. Professor V.V. Lapin helped in the investigation.

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